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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/761,512	01/20/2004	Philippe Leyendecker	PF030028	2983

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EXAMINER	
PARRA, OMAR S	
ART UNIT	**PAPER NUMBER**
2623	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/23/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/761,512	LEYENDECKER ET AL.	
	Examiner	Art Unit	
	Omar Parra	2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *02/01/2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-13,15 and 16* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-13 and 15-16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This Office Action is in response to Amendments submitted by applicant on 02/01/2007.

Priority

1. Acknowledgment has been made of applicant's claim for foreign priority based on application 03/00941 filed in France on January 20, 2003, and European application 03291099.4 filed on May 7, 2003.

Claim Objections

2. Claim 16 is objected to because of the following informalities: Typo on the referred claim number. Claim 16 refers to claim 1 as the claim it depends on. As construed by the examiner, claim 16 should depend on claim 13 and considers the reference to claim 1 a typo. Appropriate correction is required.

Response to Arguments

3. Applicant's arguments with respect to claims 1,13, 15 and 16 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims **1-6,10,13 and 15-16** are rejected under 35 U.S.C. 103(a) as being unpatentable over Shen et al. (hereinafter 'Shen', Pub. No. 2005/0022227) in view of Dunn et al. (hereinafter 'Dunn', Patent No. 5,861,906).

Regarding claims 1 and 13, Shen teaches having a system for receiving digital data in different distribution schemes (broadcasting, Video-on-demand, etc, [0001]) comprising:

a master digital terminal **(DVB-STB or CPCM Device A, Fig. 7)**, and at least one slave digital terminal connected to the master terminal by a link and able to receive protected digital data **(CPCM Device B, Fig.7, which is connected to master through digital interface IEEE 1394, [0003] or through "secured channel", [0148])**, wherein said slave digital terminal can access said protected data only if information necessary for accessing said data and received by the master digital terminal is sent by way of said link to the slave digital terminal **([0067]-[0070] or [0146]).** On the other hand, although Shen teaches that the master is able to receive "other control information for protection...such as time stamps- (commonly, time duration for validity of content access), Shen does not explicitly teach that said information necessary for accessing said protected data has to be sent within a predetermined deadline.

However, in an analogous art, Dunn teaches an interactive entertainment network system where a headend will transmit rented video content program to a user

for a predetermined period of time. Only during this predetermined accessing time, the user can make use of the received content (col. 11 lines 37-67; col. 13 lines 39-44).

Therefore, it would have been obvious to an ordinary skilled in the art at the time of the invention to modify Shen's invention to incorporate the predetermined time as taught by Dunn for the benefit of giving the content provider the opportunity of making profits from user's desire of watching again certain video content.

Regarding claim 2, the combined teachings of Shen and Dunn teach a system wherein the information necessary for accessing the protected data which is received by the master digital terminal originates from a data broadcasting system **(encryption key for encrypting content, [0036]-[0037] and [0043]. This content and this encryption key is received by the master through CPCM Stream as shown in Shen, [0049] and [0051])**.

Regarding claim 3, the combined teachings of Shen and Dunn teach a system wherein said information for accessing the data received by the master digital terminal is transformed before being sent to the slave digital terminal **(Shen, [0067] and [0068])**.

Regarding claim 4, the combined teachings of Shen and Dunn teach a system in which the transformation comprises a descrambling of said information in the master digital terminal, the descrambling being performed with the aid of keys received

beforehand by the master **(License Key, Shen, [0047])** digital terminal of the broadcasting system **(Shen, [0049] and [0051]).**

Regarding claim 5, the combined teachings of Shen and Dunn teach a system wherein the information necessary for accessing the protected data, which is received by the master digital terminal originates from the slave digital terminal, and is transformed before being resent to the slave digital terminal **(Once the encryption key is stored in device A, device B would send another key to encrypt the "encryption key" before its transmission from device A to B. In that way, the key that encrypted the "encryption key" now is part of it, it's now necessary for decrypting the content and it was generated in the slave device A, Shen [0058]-[0061] and [0067]-[0068]).**

Regarding claim 6, the combined teachings of Shen and Dunn teach a system in which the transformation comprises a descrambling of said information in the master digital terminal, the descrambling being performed with the aid of keys received beforehand by the master digital terminal **(License Key, Shen, [0047])** of the broadcasting system **(Shen, [0049] and [0051])**.

Regarding claim 10, the combined teachings of Shen and Dunn teach a system in which information necessary for accessing the protected data is sent from the master digital terminal to the slave digital terminal while being protected by enciphering using a

key shared by the two terminals **(Device B sends another key to encrypt the "encryption key" before its transmission from device A to B. At this point, the key sent by B is known by both of the devices, Shen [0058]-[0061] and [0067]-[0068]).**

Regarding claims 15 and 16, the combined teachings of Shen and Dunn teach a system wherein the information necessary for accessing said protected data comprises a secret key **(Shen [0058]-[0061] and [0067]-[0068]).**

6. Claims 7, 11,12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shen et al. (hereinafter 'Shen', Pub. No. 2005/0022227) in view of Dunn et al. (hereinafter 'Dunn', Patent No. 5,861,906) in further view of Benardeau et al. (hereinafter 'Benardeau', Patent No. 6,904,522).

Regarding claim 7, the combined teachings of Shen and Dunn teach having a system in which the protected digital data comprise television services **(Shen, [0001])** scrambled by keys **(encryption key and license key; Shen, [0037])** and in which the information necessary for accessing said data belongs to the set comprising:

a message containing keys for descrambling said protected digital data **(Shen, [0043])**.

a message containing access entitlements to the services for the slave digital terminal **(Shen, [0047])**;

On the other hand, although the combined teachings of Shen and Dunn teach being able to accept and transmit ECM and EMM messages (Shen, [0095]), they do not explicitly teach having a system in which the information necessary for accessing said data belongs to:

a message containing parameters for extracting from the data stream received by the slave digital terminal a message containing access entitlements to the services for the slave digital terminal;

a message containing partial information enabling the slave digital terminal to reconstruct its access entitlement to the services.

However, in an analogous art, Benardeau teaches a system for secure communication between two devices **(col. 4 lines 26-32)** that pertain to a television broadcasting system **(col. 9 lines 40-46; col. 11 lines 9-18 and 47-65)**. Benardeau further teaches having various methods for transmitting the usage rights (EMM and ECMs messages) for both devices in a secure manner with the use of encryption keys **(col. 2 lines 42-67 and col. 3 lines 1-23)**.

Benardeau further teaches:

a message (The EMM monthly update), containing Parameters for extracting (81, Fig. 6) from the data stream received by the slave digital terminal ("N", Fig. 3) a message containing access entitlements to the services for the slave digital terminal (ECM inside N, Fig. 3 or see col. 14 lines 51-59) ;

a message (62, Fig.5) containing partial (One of two keys needed for master-slave communication) information ("KpubT" or 68, Fig. 5) enabling the slave digital

terminal to reconstruct its access entitlement (Without this partial information, no information can be transferred between the two) to the services.

Therefore, it would have been obvious for an ordinary skilled in the art at the time of the invention to have modified Shen and Dunn's invention to include Benardeau's methods of transmitting usage rights for the devices through ECM and EMM messages with the use of encryption keys for the benefit of having a more secure link and consequently communication between both devices.

Regarding claim 11, the combined teachings of Shen and Dunn teach that the broadcasting gives a predetermined deadline for the usage of the content, and consequently any communication between the content-using devices must be within that predetermined time. On the other hand, the combined teachings of Shen and Dunn does not explicitly teach having a system in which the master digital terminal and slave digital terminal furthermore receive from the data broadcasting system a secret code and in which the master digital terminal sends said information necessary for accessing the data to the slave terminal only if it receives said secret code from the slave terminal.

However, in an analogous art, Benardeau teaches a system for secure communication between two devices **(col. 4 lines 26-32)** that pertain to a television broadcasting system **(col. 9 lines 40-46; col. 11 lines 9-18 and 47-65)**. Benardeau further teaches having various methods for transmitting the usage rights (EMM and ECMs messages) for both devices in a secure manner with the use of encryption keys **(col. 2 lines 42-67 and col. 3 lines 1-23)**.

Benardeau further teaches having a broadcasting system (41, Fig.3 or Fig.2 except blocks 8-13 and 30) from where all data, information necessary to access said data ("...the ECM containing the Control Word CW to descramble the signal", col. 11 lines 63-65) and keys for device communication ("EMM's") are sent. In addition, Benardeau teaches how those keys are exchanged between devices. In Fig.5, two broadcasted EMMs (62, Fig. 5) containing a pair of keys ("KpriT", 64 and "KpubT"68), which are stored at the master digital terminal (30, Fig.5) and the slave digital terminal (52, Fig.5). Having "KpubT", the slave can encrypt ("fa" ,70 Fig.5) any message it sends to the master (30, Fig.5), including a random slave-generated "secret code" (69, Fig.5), which will be sent and stored at the master with the aid of "KpriT". The master terminal will only be able to understand messages from other devices, only if they are encrypted with "KpubT".

Therefore, it would have been obvious to an ordinary skilled in the art at the time of the invention to have modified Shen and Dunn's invention to include the step of sending secret codes to the master and slave devices as taught by Benardeau for the benefit of having a secure way for the devices to recognize or authenticate each other with the help of correspondent keys for a more secure communication.

Regarding claim 12, the combined teachings of Shen, Dunn and Benardeau teach having a system which shows the capability of transmitting various keys from the content provider to the devices **(Ct(KpubMan) comprising the key KpubMan encrypted by KpriSystem, Benardeau, col.14 lines 36-40)** . Although not explicitly

said, the system is able to send another set of public/private keys to both master and slave terminals after "Kprit" and "Kpubt" were sent to replace the randomly generated key value.

7. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shen et al. (hereinafter 'Shen', Pub. No. 2005/0022227) in view of Dunn et al. (hereinafter 'Dunn', Patent No. 5,861,906) in further view of Stefik et al. (hereinafter 'Stefik', Pub. No. 2006/0100417).

Regarding claim 8, the combined teachings of Shen and Dunn teach that the slave sends a message to the master device if it wants to access content **([0058]-[0062]).** On the other hand, the combined teachings of Shen and Dunn do not explicitly teach that the deadline is counted down from the dispatching by the slave digital terminal of a message to the master terminal.

However, in an analogous art, Stefik teaches that in distributing and assigning rights enforcement for digitally encoded woks, a time stamping or time specification is included to assign start date or specify some duration as to when a right may be exercised **[0140]**. Stefik further teaches that some rights may be exercised in a metered time fashion in which the duration time can be split in different segments. For example, if a user is assigned X-amount of access time, the count down starts at anytime the viewing starts and stops when the content is not being used. This happens until the total assigned access time is up.

Therefore, it would have been obvious to an ordinary skilled in the art at the time of the invention to have modified Shen and Dunn's invention with the "in-chunks" usage of the access time by the devices (either master or slave) as taught by Stefik for the benefit of avoiding making the user pay for services that he/she might not consume (when the content is not being used).

8. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shen et al. (hereinafter 'Shen', Pub. No. 2005/0022227) in view of Dunn et al. (hereinafter 'Dunn', Patent No. 5,861,906) in further view of Garfinkle (Pub. No. 2001/0037506).

Regarding claim 9, the combined teachings of Shen and Dunn teach having a system where a predetermined limit of time is imposed on the user for using video content (col. 11 lines 37-67; col. 13 lines 39-44). On the other hand, the combined teachings of Shen and Dunn do not explicitly teach that the predetermined time starts to be counted down from the dispatching by the slave digital terminal of a message to the master digital terminal.

However, in an analogous art, Garfinkle teaches that once the content is transmitted to the user via a data stream, the limit time starts counting down at the head end **([0014])**.

Therefore it would have been obvious to an ordinary skilled in the art at the time of the invention to have modified Shen and Dunn's invention to include the start of the counting down once the head end sends the data stream as taught by Garfinkle for the

benefit of letting the head end know when the accessing period would end as opposed than starting the countdown when the users starts the program at his will.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Omar Parra whose telephone number is 571-270-1449. The examiner can normally be reached on Under Academy Schedule.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Grant can be reached on 571-272-7294. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

OP

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